Comparisons of Job Characteristics

Focus Occupation: Machinists (51-4041)
Associated Occupation: Engine and Other Machine Assemblers (51-2031)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Machinists (51-4041)
Associated Occupation: Engine and Other Machine Assemblers (51-2031)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	14.7	18.0	>	Current knowledge level is likely sufficient
Production and Processing	6.0	8.8	12.7	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Machinists (51-4041)
Associated Occupation: Engine and Other Machine Assemblers (51-2031)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation Monitoring	6.6	10.3	12.0	>	Skill level is likely sufficient
Quality Control Analysis	5.9	10.1	12.6	>	Skill level is likely sufficient
Repairing	3.4	8.1	8.5	0	Current skill level may be sufficient
Troubleshooting	4.5	8.0	10.2	>	Skill level is likely sufficient
Equipment Maintenance	3.5	7.9	9.3	>	Skill level is likely sufficient
Equipment Selection	3.3	5.5	8.6	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Machinists (51-4041)
Associated Occupation: Engine and Other Machine Assemblers (51-2031)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Arm-Hand Steadiness	6.8	11.1	11.0	0	Current ability level may be sufficient
Visualization	7.5	10.7	10.1	0	Current ability level may be sufficient
Finger Dexterity	7.6	10.6	11.6	0	Current ability level may be sufficient
Manual Dexterity	6.5	10.3	11.1	0	Current ability level may be sufficient
Control Precision	6.6	10.1	13.3	>>	Current ability level is likely more than sufficient
Multilimb Coordination	6.0	10.0	10.7	0	Current ability level may be sufficient
Extent Flexibility	4.8	9.6	8.3	<	Some improvement in abilities may be required
Trunk Strength	5.7	9.6	7.5	<	Some improvement in abilities may be required
Reaction Time	4.8	9.1	10.1	>	Current ability level is likely sufficient
Hearing Sensitivity	5.6	8.5	9.3	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 79

Focus Occupation: Machinists (51-4041)
Associated Occupation: Engine and Other Machine Assemblers (51-2031)

Work Activities	Exclusivity of Activity
Examine products or work to verify conformance to specifications	15
Fabricate, assemble, or disassemble manufactured products by hand	11
Install equipment or attachments on machinery or related structures	48
Lay out machining, welding or precision assembly projects	63
Maintain welding machines or equipment	70
Move or fit heavy objects	8
Read blueprints	10
Read specifications	23
Read technical drawings	7
Set up and operate variety of machine tools	62
Understand technical operating, service or repair manuals	6
Use arc welding equipment	62
Use hand or power tools	2
Use knowledge of metric system	39
Use precision measuring tools or equipment	17
Use technical information in manufacturing or industrial activities	67
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Machinists (51-4041)
Associated Occupation: Engine and Other Machine Assemblers (51-2031)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting tools	18
Forming tools	2
Holding and clamping tools	3
Hydraulic presses	25
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Machinery for working wood and stone and ceramic and the like	12
Metal bending and forming machinery	17
Power tools	2
Prying and bending tools	10
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.